

Swedening the Deal: Food, Famine, and Power in the Great Northern War

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And after all, you do at least get decent food out there, so I hear.

– *All Quiet on the Western Front*
(Remarque 1982, p. 166).

ABSTRACT: There is a reason they say an army marches on its stomach. Well-fed soldiers fight better than starving ones, but until the modern era, it was a great logistical problem to provide reliable food and resources to an army on the march. The Great Northern War (1700–1721) was a conflict in which an alliance led by Peter the Great, Tsar of Russia, challenged the supremacy of the Swedish Empire; at that time, Sweden's territories almost encircled the Baltic. At stake were territories which would allow Russia to gain a port on the Baltic Sea, giving Russia access to European trade. Also, the King of Denmark, Frederick IV, wanted to reclaim traditionally Danish lands in Southern Sweden, and the Polish-Lithuanian monarch, Augustus II, wanted to take Livonia from the Swedish Empire in order to solidify his crown as a hereditary kingship, thereby granting him more power and authority. This war is also notable for the use of more modern methods to supply the army beyond looting the land: Sweden, bolstered in the early part of the war by an allotment system begun by Charles XI, had comparatively large peacetime rations for its serving men. It remained in use for the next 200 years.

Although there is keen interest in the military history of many conflicts, the Great Northern War (1700–1721) is relatively uncharted in terms of food history, despite its ability to make visible the limits of the possible logistics of supply for early warfare in a European context. The images that emerge from current research typically focus on the leadership and military strategies of Charles XII of Sweden and Peter I of Russia and the aftermath of the war,¹ which toppled Sweden from its position of power and established Russia as the dominant force in the Baltic. In this paper, soldiers' diaries, letters, and other historical accounts show that in the early part of the war, Sweden set a high standard for feeding its troops, which in part led them to awe-inspiring victories against their enemies. In the later years of the conflict, food shortages and destruction of the land were key strategies in Russia's effort to wrest the upper hand from an enemy which seemed unbeatable.

This study will frame these elements in terms of contemporary European mentalities toward food and warfare. Analysis of these materials will demonstrate the

reality of food, famine, and superiority in what food anthropologist Sidney Mintz termed “the single most powerful instrument of dietary change in human experience”: war (1996, p. 25). In *Tasting Food, Tasting Freedom* (1996), Sidney Mintz outlines the processes by which a society learns to “consume food differently,” (p. 17); that is, how to integrate different foods, how to prepare them differently, how the contexts in which we eat may change, and how the purposes for which we eat can be changed. War, Mintz notes, greatly changes the eating habits of a community or nation.

The purpose of this work is to explore the historical significance of soldier rations and mentalities about food as it pertains to feeding and supplying an armed force.² This is an exploratory paper using a few carefully selected examples to suggest connections to current scholarly thinking about foodways which can be enriched through closer study. Three main elements of military food supply will be examined: 1) what food was deemed acceptable by each force, as determined by the generals or heads of military; 2) how the ability to supply such food worked; and 3) what effects these choices and methods of distribution may have had upon soldiers and their ways of thinking about the food they ate. The intention is to use these matters to illustrate how food, in wartime, is power.

During a military campaign, both civilians and soldiers are expected to serve the needs of the nation in different ways. Soldiers and the resources to feed them, the foodstuffs themselves, cooking paraphernalia and expertise to make a proper meal, must be mobilized. As Sidney Mintz (1996) notes,

Large numbers of persons are assembled to do things together — ultimately, to kill together. While learning how, they must eat together. Armies travel on their stomach; generals — and now economists and nutritionists — decide what to put in them. They must do so while depending on the national economy and those who run it to supply them with what they prescribe or, rather, they prescribe what they are told they can rely upon having (p. 25).

In previous conflicts, such as the First Northern War between Sweden and Denmark-Norway (1563–70), the Swedish government experienced massive troubles both raising the number of soldiers needed and keeping them properly supplied. The army typically lived off the land, taking contributions from the local populations where they marched. The official statement to these people was, in essence, that the army “wished to do [the peasants] no

harm, but leave them safe in their houses with their families, and protect them from all violence and desire or take nothing from them apart from these contributions, and necessary fodder and food" (Bienemann 1902, pp. 8, 15–16). The contribution to gain such noble treatment by the army was set at eight *lod* of silver per household (Frost 2000, p. 75).

At the Diet of 1682, King Charles XI announced that he would raise provisional infantry regiments of 1,200 men and asked how such recruits would be provided.³ The Peasant Estate made their preference for the *knektehåll*, (contract) clear. In exchange for peasant farmers banding together, usually in a *rota* of 2 full-value farms, to provide the necessary wages and supplies for one soldier per *rota* (e.g. wages, clothing, and housing), the farmer, his family and servants were exempt from the traditional conscription which was used to raise a fighting force. This tactic for raising manpower had been used in 45 of the 60 years before 1679, having profound effects on the communities the recruits were pulled from. In the example of one Swedish parish, 236 men were conscripted in sixteen levies between 1620 and 1639, and almost all died in combat. This "radically altered the demographic profile of the parish," almost halving the number of men between the ages of fifteen and sixty (Lindgren 1980, pp. 144–77; see also: Frost 2000, p. 205). In addition to the heavy toll of warfare on the population, conscription could create deep resentment within the community. Large segments of society, including merchants or artisans, were often exempted. Luard (1992) notes, "[i]t was generally believed that recruits should be drawn from the classes of the lowest social value, including criminals" (p. 39). As a result, conscription was an ineffective way to raise an army. In 1627, when more than 300 soldiers were conscripted from Kronoberg County in southern Sweden during war with Poland, only 60 men appeared on the appointed day (Nelson 1993, p. 13). The *rota* also received tax incentives for agreeing to support soldiers in this way and the king was guaranteed a large, easily mobile force at far less cost to his own Treasury. When the soldiers were not needed, they would work the farms which provided their income, contributing to the wellbeing of the farm in another way. The community thus banded together to provide an army to protect the interests of the state, rather than being strongly encouraged to contribute money or supplies in exchange for dubious promises of safety.

By instituting the allotment system, the Swedish crown was able to maintain a professional army (Upton 1998, pp. 73–8; Derry 2000, pp. 152–3). It also made the Swedish army one of the largest in Europe and one of the few which did not depend largely on mercenaries or conscripted soldiers (Nelson 1993, p. 46). Moreover, they could be mobilized quickly in times of war, saving weeks which would normally be spent on calling men to serve or scouring the Treasury for money to pay mercenaries, under the old system.⁴ At the start of the Great Northern War, Sweden had an army totaling approximately 67,000 men:

25,000 infantry and 11,500 cavalry soldiers raised by the *rotar* as part of the allotment system. A further 22,000 foot soldiers and 8,500 cavalry were contracted by the crown (Oakley 1992, p. 104). Ongoing conflict in the Baltic region during much of the seventeenth century had helped to turn Swedish soldiers into a highly trained militia whose early success was undercut in the later years of the Great Northern War by supply shortages and famine, among other factors (Parrott 2012, p. 99).

With these advantages, the Swedish army could afford to set a high standard for the care and feeding of its men. The ideal ration prescribed for the Swedish troops in 1700 included a considerable amount of fat and protein: 625 grams of dry bread, 850 grams of butter or pork, one-third liter of peas and 2.5 liters of weak beer for each soldier (Åberg and Göransson 1976, pp. 26–7). In July 1718, near the end of the Great Northern War, the listed ration for each soldier in the Hälsingland regiment similarly included 637 grams of bread, $\frac{1}{3}$ liter of groats (*gryn*), 283 grams of meat and 16 grams of salt, as well as some brandy and tobacco. Men overseeing the rationing and distribution of wages noted that the rations were "quite abundant," although the prescribed 170 grams of butter or pork was missing (Norrby 1980, p. 81). This regiment occupied the relatively peaceful Trondelag region in Norway at the time, and so can be expected to have had better access to food and critical supplies.

This gives us a general picture of both what was significant to the Swedish troops and what they could, or thought they could, rely upon having: bread, dried peas or groats, meat or butter, alcohol in the form of beer or possibly brandy, tobacco and a bit of salt. Bread has long been a staple in the diets of the civilized West. Bread wheat is known to have evolved by 8000 BCE and archaeological remains of leavened bread as we know it date back to 4000 BCE in Egypt (McGee 2004, p. 517). As far back as the 8th century BCE, Homer used the word *sitòfagoi* ("bread-eaters") as a term synonymous with "men" in his writing (Montanari and Brombert 2015, p. 54); and indeed, from the diary examples discussed herein, "bread" is often synonymous with "food." Albrecht von Wallenstein, a military leader in the Thirty Years' War, once wrote that his army needed bread, then munitions, and finally wages, in that order (Hummelsberger 1986, p. 62; Parrott 2012, p. 196). Bread was given to soldiers throughout history because of its portability, tradition and bread's position in diet as a daily necessity. In this period, every soldier required bread and 680 grams per day was typical. To provide bread for a force of some 30,000, a week's supply of flour, and the wood and ovens required to bake it could require 250 carts (Parker pp. 75–6). During the Great Northern War, a diary entry from Second Lieutenant Robert Petrés dated April 13, 1704 comments that Chief Lieutenant Leuvenhaupt ordered 300 horses to drive in provisions but the enemy had already overtaken 30 to 40 men at the task, leaving no more than two alive. Upon learning of the attacks, Leuvenhaupt

abandoned whatever provisions and livestock had already been collected to make a quick escape (Petrés 1902, p. 19) reflecting a time-honored military strategy of hitting the enemy where it hurts most: the food supply.

As another often-mentioned ration, the benefits of alcoholic beverages to soldiers in combat are myriad. In general, beer was thought to be highly nutritious, as the malting process “raised the caloric value of the base cereal, giving beer more calories than bread made with an equivalent amount of grain” (Phillips 2014, p. 37). In addition, it was rich in carbohydrates, vitamins, and proteins, and gave the drinker a pleasant feeling. The daily ration could be drunk without interfering with one’s work, making it excellent for hydration. Indeed, British medical officer John Bell, who served in the seventeenth century, regarded beer as an “invigorating, antiseptic, salutary beverage [...] highly nutritive” for soldiers (Phillips 2014, p. 276). Keegan (1978) states,

The prospect of battle [...] seems always to alarm men’s anxieties, however young and vigorous they be, rather than excite their anticipation. Hence the drinking which seems an inseparable part both of preparation for battle and combat itself. Alcohol, as we know, depresses the self-protective reflexes, and so induces the appearance and feeling of courage (p. 326).

The importance of a ready supply of bread and alcohol, in particular, is clear as far back as Ovid’s *Metamorphoses*, composed around 8 AD. The three daughters of a priest of Apollo named Anius were able to change everything they touched into bread, wine or oil. Lines 790–799 relate that Agamemnon heard of their gifts and demanded they feed the Greek army, under threat of war (Ovid 2010, p. 371). Anius also had a son whose gift was to prophecy the future, but apparently this was not as valuable a skill to the military leader as producing food.

Considered in this light, food can be seen as central to a soldier’s survival and identity as a civilized person of Western culture. Additionally, the way any given group eats helps assert its hierarchy and organization, and at the same time, both its togetherness and the otherness of whoever eats differently. Food is central to individual identity, in that any given individual is in part constructed, biologically, psychologically and socially by the food culture he/she is a part of (Fischler 1988, p. 275). Sidney Mintz (1996) comments that the ability to supply an army properly is itself a show of power,

not only because it may include some ability to bestow meaning, but also because meaning coalesces around certain relationships. Objects, ideas and persons take on a patterned structural unity in the creation of ritual, [...] But it was the purveyors of the foods, the givers of employment, the servants of the state, who exercised the power that made the foods available (p. 30–31).

However, rations could not be counted on in the field in the same way they could be during peacetime or when occupying relatively stable regions. Against the high rate of attrition, Charles XII’s insistence on marching into Russia and the enemy attacks on their relief forces and supplies, the allotment system was not enough. Following their stunning victory at Narva in 1700 against a much larger Russian force, by 1702 one regiment was so “poorly provided with uniforms and provisions” (Höglund 1996, p. 48) that they had to be placed in Reval in the Baltic provinces. In August of 1708, Charles led his troops into Russian territory, where they faced Peter the Great’s forces, which were stationed between the Soja and the Dnieper. Waliszewski (2013) comments that “they were driven to support themselves by gathering ears of corn, which they ground between two stones. Sickness began to thin their ranks. Their three doctors, so the fierce troopers said, were ‘brandy, garlic, and death’!” (p. 391). By this time, diaries frequently mention that “the army had long suffered from a shortage of bread” (Petrés 1902, p. xxv). By September 1708, the Russians had destroyed the landscape around their enemy in an effort to keep the Swedish from finding food or supplies on the march. A diary entry by Lieutenant Joachim Matthiae Lyth from September 28 comments,

Under this march through the forest, we lost many men and many horses, which died of hunger, so that our misery grew ever greater; we had to watch as both men and horses alike, exhausted by hunger, dropped to the ground and died there miserably; so it remained for us doubly worse (Lyth 1903, pp. 60–1; Frost 2000, p. 286).

Reinforcements led by Swedish general Lewenhaupt met Charles’s force in October of 1708, but they had been defeated by engagements with the Russians on the way, and the relief rations and artillery they carried was lost. However, the diary of a Second Lieutenant reveals brennevin⁵ and tobacco were brought out to the men by General Major Lagercrona, likely to bolster their morale (Petrés 1902, pp. 183–4). The taste of tobacco and the comfort of brennevin may well have been emblems of everyday life to the soldiers, much like Coca-Cola was to the soldiers of World War II. In 1942, when supplies of the soft drink were threatened by sugar rationing of that time, one letter from January 1942 pleaded with a local bottler to keep producing the beloved beverage: “Very few people ever stopped to consider the great part Coca-Cola plays in the building and the maintenance of morale among military personnel” (Pendergrast 2013, p. 185; Mintz 1996, pp. 25–32). Back in the Ukraine and on the march, thousands of soldiers ultimately starved or froze to death, though the war was far from over (Höglund 1996, p. 5). The inability of the Swedish government to provide food for its troops was a microcosm of the larger problems of the war and any advantage the allotment system provided them was quickly spent.

The regiment leaders did what they could with the supplies they had. At the battle of Helsingborg in Denmark in 1710, the army marched on the alcohol in its bloodstream, having only three farthings' worth of brennevin that morning, and nothing else (Höglund 1996, p. 13). Despite this extreme circumstance, they were able to stop the Danish army's attempt, for the third and final time, to reclaim its Scanian lands which had been Swedish territory since 1658. Second Lieutenant Robert Petrés comments in a diary entry dated December 31, 1708 that his men were charged far too much (1 ducat) for a *kanna* (approximately 2.6 litres)⁶ of brennevin, but the cost was split between 12 soldiers (1902, p. 203). As mentioned above, alcohol was a necessary thing in the military, from our earliest records. Speaking of Greek and Roman battle tactics, Hanson (1989) states that the formal nature of Greek battle created a

mounting, relentless tension as troops were deployed in sight of each other and yet at the same time provided a lull before this storm, where soldiers might have tried to steel their jittery nerves in any possible manner. Since Homer, the Greeks had recognized that alcohol had some analgesic value against wound trauma. Many soldiers may have been drinking simply to dull the senses in expectation of a painful penetration would to come (125).

Alcohol was a necessary expense that day, despite having survived the desolation of the Ukraine campaign a few weeks before or perhaps because of it. The brennevin may have been a salve to any hurts or "jittery nerves" they may have been suffering in the aftermath.

It is not uncommon to see degradation of soldiers' food supply and diet as a war goes on, especially in pre-modern times. Even today's militaries, with the advantages of pre-packaged food and speedy distribution, can have trouble keeping soldiers well-fed in the field. A 1995 US military study showed that there was still "an energy deficit of 500 to 2,000 kcal/d and resultant weight loss for the study participants" in the field (Marriott 1995, p. 10), but that augmenting their rations with frequent snacks and hot meals could help them to maintain weight. The difference here is that the United States has the ability to feed its soldiers consistently enough that this small weight loss is manageable. For the Swedish army, loss of rations could mean death for the men. About 150,000 Swedish perished in the Great Northern War; 25,000 in combat and 125,000 more due to famine, sickness and exhaustion (Wolke 2004).

Snack foods and regularly scheduled hot meals were a distant memory to many Carolean regiments in the field. When food supplies were low, they ate what they could cull from their rations, and when that failed they ate whatever they could find on the land. Described by Andrea Maraschi as a "hierarchy of desperation,"⁷ the end result of such a hierarchy could be grim indeed. Historically, there are many examples of a fighting force being driven to eat their support

animals (e.g. horses, dogs) and finally to cannibalism in an attempt to survive⁸, though there is no evidence that the Swedish army did so in this conflict. Sweden and its army were deeply Christian at this time,⁹ and the Church had longstanding rules regarding the eating of certain flesh.¹⁰ It is unclear whether or not the Swedish soldiers might have broken this taboo in an attempt to survive, if records of such acts were lost, or if cold and disease killed them too quickly to try. It is clear the situation became direr over time. In 1716, remarks on the general muster were depressing, as most men were without uniforms, and "ammunitions and bread wagons the same" (Höglund 1996, p. 57).

Carolean soldiers were much more likely to desert the camp or otherwise try to escape in times of hardship. A member of the Dalarna Regiment, Jonas Wallberg, was one of men who surrendered to Russia after the disastrous Battle of Poltava. His diary describes prison rations as a quarter barrel of flour, some grouts and a palm of salt per month for each prisoner. After two years of this, he names food as the motivation for multiple escape attempts, despite the heavy consequences for his actions:

me, 4 under officers and 1 corporal decided to escape. We had walked 12 miles when we reached a village and to avoid famine we tried to beg for food in Russian. A young farmer revealed us to the villagers as Swedish refugees and they rang a bell calling in all the surrounding farmers who came running with spears and sticks. They arrested us and beat us badly. The next day they escorted us back to the prison camp at Ziroda. There, Colonel Rickman ordered his men to put tree bolts on our feet so we had to sit for 6 weeks getting only water and a handful of flour per day (Wallberg 1912, p. 309).

Wallberg's toil continued as he attempted to escape a second time. When they were captured by Russian Cossacks and brought back to camp again, they were "tortured nonstop." Despite this, the diary shows that the soldier was concerned with food above all else: "I desired to find someone among the population who would be willing to give me some extra food in secret" Wallberg 1912, p. 309), but there was none to be found.

These accounts of suffering, from those soldiers who defended the Scanian territories from a Danish march with only a little alcohol to warm their bellies to soldiers who risked torture and imprisonment in search of food beg the question: what were they fighting for? Sidney Mintz (1996) comments,

It may be relevant that soldiers overseas have not only been stripped of almost all the marks of their individuality (clothing, jewelry, coiffure), but because they are in a remote land, they also feel bereft of those material representations of their culture that are embodied in architecture and in linguistic forms (familiar buildings, signs, advertising). Under such circumstances, which can

be alienating, objects that can “carry” a displaced sense of culture, such as foods and beverages, take on an additional potential power (p. 27).

The food itself, in the absence of all other familiar markings of home and country, could represent the quintessential national experience to a soldier on the move. In addition, native soldiers’ ability to stomach the rations could mark them as one of Sweden’s own. Notes from a regiment raised in 1707 through enlistment of Saxon prisoners of war comment that the new recruits struggled with the unfamiliar food, which was often dried and heavily salted, causing high rates of sickness and death (Höglund 1996, p. 50). Other armies suffered this as well, as original recruits perished and more men had to be brought in from foreign lands. On the subject of conscripts from Norway brought into the Danish army — one of Sweden’s enemies in the Great Northern War — “Their eating habits surprised somewhat though. Their standard bread was made from oat and water, so initially their stomachs had trouble with the sourdough bread of the Danish army, but if they only survived that, they became good soldiers” (Höglund, Sallnäs and Bespalov 2006, p. 117). Claude Fischler (1988) states that,

[f]ood is central to our sense of identity. The way any given human group eats helps assert its diversity, hierarchy and organization, and at the same time, both its oneness and the otherness of whoever eats differently. Food is also central to individual identity, in that any given individual is constructed, biologically, psychologically and socially by the food he/she chooses to incorporate (275).

With this in mind, we can see then how the otherness of a soldier who cannot stomach the chosen rations for a given group would mark himself both as outside his normal milieu but also biologically different from his peers on an individual level. In another way, those in power who make decisions regarding feeding the group, such as General Major Lagercrona who allowed the familiar tastes of brennevin and tobacco to be distributed to the men despite the difficult loss of reinforcements and supplies in the fall of 1708 identified themselves as leaders in the groups hierarchy, with the authority to give out food and to provide whatever relief these items could offer. This marked them all as one, making the best of a difficult situation by partaking together.

Conclusions

Though this research is brief and only compares a few primary sources in the form of diaries from the Great Northern War, the topic could easily be expanded to include other materials, other conflicts or similar comparisons between other nations and their treatment of military rations and supply. Military history is a growing field, and

much has already been done with more modern conflicts such as the World Wars period, but it would be interesting to see what interpretations might be made with older conflicts across cultures. As Sidney Mintz (1996) mentions, there is still much to be done with questions of large-scale structural changes to society and culture (e.g. war, migration) and how they cause people to “reorder their categories of meaning in new ways, and to eat (and drink) differently” (pp. 30–1). By examining the military engagement through the lens of food choices and supply we may discover more within these categories of meaning in our foodways and how they are manipulated by those whom Mintz calls “the purveyors of the foods” (1996, p. 31) who make foods available to be reinterpreted by the public. In trying to understand the deeper meaning of food and power in war, we enhance our understanding of food history as a whole.

With this, it is possible to suggest that, according to a long tradition of military and civilian use, the bread the soldiers ate was both practical, portable, nourishing and an emblem of home and, in essence, what the soldiers were fighting for. Alcohol represented civilization, encouraged soldiers when there was little else and provided much-needed hydration; moreover, it represented a surcease of the pain and psychological strain of warfare. The rest of the rations provided essential energy in the field. Sweden’s adoption of the allotment system before the Great Northern War showed an interest in improving supply chains and access for soldiers to essential rations, as well as forming a more communal system by which soldiers would be available for the army, rather than the heavy burden which conscription had placed on the people in the past. Unfortunately, the optimism and early successes of the war, exemplified by the incredible victory at Narva, was not to last. As diaries and other evidence shows, on subsequent campaigns, soldiers were frequently without rations or essential supplies and instead had to forage or beg for food. Much like the way soldiers in World War II viewed Coca-Cola, it must have been that the bread or brennevin they were given that came to represent home and country, something to keep a man going when survival was not certain; in fact, the ability to eat a soldier’s ration without indigestion could easily mark one as an insider, one who belongs to the group. The fact that many more Carolean soldiers and civilians died from malnourishment and poor health than died in combat is a clear indication of Sweden’s inability to leverage the power of its resources, so carefully selected and arranged in peacetime to produce a large, efficient, well-fed military, into a victory against the Russians, who overwhelmed with patience through the long cold winters, burning the landscape, and attacking supply wagons so that no food could be found.

About the author

Beth Rogers has a BA in News-editorial journalism from the University of Illinois. In 2011, she received her

Masters in Secondary Education with teaching certification in English Education. She is certified to teach in both the United States and Iceland, where she has taught everything from English Literature to Computer Coding to Team-Building. She also taught English as a Foreign Language for 1 year in Taiwan. She holds a second MA in Medieval Icelandic Studies from the University of Iceland.

She recently began a PhD at the University of Iceland exploring the cultural significance of dairy products in medieval Iceland. This will draw on her passion for food history and her new love of reading about skyr. She has published articles on an array of topics, from a literary analysis of *Völsunga saga* to an examination of food uses and portrayals in the Russian Primary Chronicle.

Notes

1. Voltaire published a biography aggrandizing the Swedish monarch in 1735, *The History of Charles XII, King of Sweden*. See also: Bain 1902 for an investigation of Charles XII's character and actions during the Great Northern War; Keep 1985 on the Russian army and Peter's leadership during this period; Massie 2012 offers a comprehensive biography of Peter the Great; Rogers 1995 summarizes key arguments regarding military tactics throughout early modern Europe.
2. Parrott (2012) outlines the sophisticated and extensive networks of private enterprise required to properly supply an army in early modern Europe; Chapter 2, "Supplying War" in Parker (1996) discusses how seventeenth-century European armies, which grew to include 10–12 million men, handled recruitment, financing and supply matters (p. 46).
3. For a detailed description of the Diet of 1682 and its legislation, see Upton 1998, pp. 43–49.
4. A levy was issued in February 1689 to distribute the burden of feeding, transporting and housing troops on the march over the entire population rather than, as was typical, having the costs fall upon communities surrounding main roads; a modified march order in April 1696 attempted to quell public outcry over the levy, explaining "because all will enjoy the defense and security [...] all, each according to their condition, help to sustain the burdens involved" (Upton 1998, p. 82).
5. Brennevin is a schnapps common to Scandinavia, called "brenwijn" in the original sources
6. (Cardarelli 1999, p. 208).
7. A. Maraschi, "Sucking Powers, Sucking Identity. Giants, Witches and Cannibal Heroes in Medieval Iceland", manuscript submitted for publication (2018), pp. 7–8.
8. Notably, Saxo Grammaticus's *The History of the Danes* (1979) tells of the starving army of the Danish king, Hadingus, which was reduced to this diet in war against the Swedish at the beginning of the 13th century (Book I, p. 28).
9. Gudmundsson (2014) comments, "Historians writing about the battles of Charles XII agree that the soldiers' morale and discipline instilled by chaplains contributed to the Swedish victories." (p. 213). If army commanders knew a battle was coming, soldiers were encouraged to partake of the Communion; otherwise, regimental prayers with hymns and prayer occurred twice per day, while services held three times per week included a sermon (Gudmundsson 2014, p. 214).
10. Leviticus 11 covers acceptable food, and warns against eating horses because they have split hooves but do not chew cud. Likewise, dogs and other animals were forbidden because they walk on their paws on the ground and are thus unclean. Medieval penitentials discuss common transgressions such as the eating of "unclean" foods and the proper penance for them; Bonnassie 1989 compares *Libri Paenitentiales* and the *Chroniques* and *Annales* to identify seven categories of food prohibition, ranging from touching to partially eating to knowingly eating the "unclean" animals.

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